

Collection resources: collaborating with faculty to manage journal expenditures

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Today I want to talk about how we at Kent State University are attempting to gain some control over the annual double-digit inflation to the cost of scientific journal subscriptions. We have embarked on a what I refer to as a "serials management" project designed to insure that we are able to maintain journal collections that are core to the research, teaching, and learning needs of the Kent faculty and students.

The Louisiana State University model

Our project is based on a serials management approach¹ developed by Charles Hamaker who is the Assistant Dean for Collection Development at Louisiana State University. About eighteen months ago I had a conversation with Mr. Hamaker in which he explained to me that they were trying a radical new approach to reducing journal expenditures at his institution. I was so intrigued by his plan that I began discussing it with other academic collection development librarians from around the country and from around my state of Ohio at various conferences and meetings. It turns out that some of my colleagues had, in fact, heard of Mr. Hamaker's plan and even had attempted to implement a similar plan with very mixed results at their institutions.

Desiring to explore this further, I became inquisitive as to which elements of the Louisiana plan were key to its success, which elements of institutional culture, perhaps, contributed to its failure at some other universities, and how could it be adapted to work at my institution. First, let me explain exactly what I learned of the Louisiana model. I must at this point extend grateful acknowledgement to Charles Hamaker for sharing a great deal of information with me through numerous telephone conversations and electronic mail correspondence.

The library at Louisiana State University, like many many North American academic libraries, had been through several major journal cancellation projects in recent times. Mr. Hamaker was concerned that the process used to make cancellation decisions was a negative approach. It was the typical scenario, used throughout the United States, of providing an academic department with a list of current subscriptions, the cost for each title, and a target dollar amount that faculty within that department must identify from the list for cancellation. The end result would be a reduced number of subscriptions, without any possibility of adding new subscriptions even though the focus of some academic programs may have changed across the years.

So, Mr. Hamaker decided to not provide faculty members with copies of their current subscription lists. Rather, focusing on selected science departments where journal inflation is most intolerable, each faculty member was approached and asked to

submit a list of journal titles in absolute priority order that were important to their specific and immediate teaching and research needs. Lists were then examined to determine which titles appeared on more than one list in order to know, based on demand, which ones were core and therefore the library should maintain subscriptions. In other words, core titles are those that are important to two or more faculty members. Over the years, core titles, and thus subscriptions, would change as individual faculty members come and go from the university.

Faculty members were also asked that for those titles identified by them, which ones would be acceptable to get the articles from commercial document delivery services as needed, rather than having the title readily available on-site. The guidelines given for making such distinctions were that journals that made heavy use of color illustrations or fine print may not be photocopied or transmitted very well by commercial services and therefore should be available on-site. Also, titles that would be used frequently should be available on-site. I should also mention that obtaining articles from commercial document delivery services would be done at no charge to the library patron.

After implementing this plan at Louisiana State University, Charles Hamaker was able to report the following from a six-month long study of articles ordered from a commercial service. During a six month period, they ordered 1006 articles, representing 540 different journals, for a total cost of \$12,278. Of the 540 journals, sixty were titles that they did, in fact, subscribe to but the needed issue had not yet arrived, was missing, or was at the bindery and thus unavailable. That leaves 480 journals that they did not subscribe to, but if they had would have cost over \$200,000.

The bottom line from my perspective is that they realized approximately a 95% savings, at least hypothetically. I say hypothetically because there is no evidence that they would actually have been able to afford those 480 subscriptions in the first place. But the important point is that they demonstrated how cost effective it can be to purchase lesser used scientific articles on demand. Of course, purchasing articles on demand and then giving them to library patrons may allow a library to dramatically reduce the size of its journal collection, but it does not speak to the traditional role of North American university research libraries to build extensive and somewhat comprehensive collections in selected areas. I will have more to say about that momentarily.

The Kent State University implementation

As mentioned, I was interested in seeing if I could implement an approach at Kent State University like the one done at Louisiana. In my discussions with librarians from around the United States who had tried Mr. Hamaker's plan, I learned that there are two key ingredients that must be in place for success, or at least to avoid failure.

The first ingredient is that the University's administration must be in support of the project. Asking faculty to take the time to really think about which journal titles are most important to them for their teaching and research, not to mention putting those titles in an absolute priority order, is a politically tricky undertaking. In our case I made sure that our Provost heard about the project first from the Dean of Libraries and

myself. In this meeting the Provost acknowledged that something must be done to gain some control over our journal costs and that he was willing to let us proceed with this plan. I find it good practice to eliminate the threat of someone telling on you to your boss by beating them to the boss's door.

The second ingredient for success is that faculty must be willing to participate. It is difficult to determine the most important journal titles for an academic department if one only receives prioritized lists from a few of the faculty members. It is not hard to imagine that without introducing the project carefully and with detailed explanations and discussions, faculty members may quickly decide that this is simply a shell game designed to reduce subscriptions, which, of course, is only partly correct.

At Kent, once it was agreed to develop a serials management project, and once we had gained the support of our Provost, we decided to begin with a pilot project using the Chemistry department in order to test assumptions and procedures. The decision to start with chemistry was a fairly easy one to make.

I assume that it is well understood that scientific journal costs are the most threatening to academic libraries. At Kent, the titles received for just four of our science departments, Chemistry, Physics, Biology, and Mathematics, account for 46% of our total journal expenditures. The remaining 54% goes toward meeting the subscription needs of forty-five other academic programs and thirteen special library funds including our reference collections.

Of the four science departments, Chemistry's subscriptions consume the most money, accounting for 18% of our total journal expenditures. In fiscal year 1996, our chemistry subscriptions cost \$312,000, a 19% increase over the previous fiscal year. Obviously, we believe that we can't continue to cover this rate of increase indefinitely. This is the main reason why we focused on the Chemistry Department to begin our serials management project. Also, each academic department at Kent has a faculty member assigned to work with the library to help guide our collection development efforts. We found the Library Representative in the Chemistry department to be most receptive to trying something, anything really, to address this problem. He was extremely important in helping us gain the rest of the Chemistry faculty members' compliance.

We started with two very important assumptions: 1) that scientific journal costs would continue to increase at rates of 12% to 20% annually, and 2) that we would continue to experience minimal increases to our library materials budget. In fact, using fiscal year 1991 as a base, we know that the cost of journal subscriptions at Kent has increase by 36% while our total materials budget has increased by only 8% during that same period. We have been able to manage the crisis of spiraling journal costs during that period of time mainly by canceling over 1,000 subscriptions in 1992 and by occasionally receiving significant one-time funding from the Provost which typically has just moved the problem ahead into the next year.

Given what I had learned from other universities and given these assumptions, we developed what I term a "Trilateral Plan." Trilateral meaning that it involves a

commitment from three constituencies: the Chemistry Department faculty, the Libraries, and the University Administration.

The Chemistry faculty must commit to re-defining how they think about libraries. The reality of the modern age is that academic libraries can no longer afford to build large collections of materials in anticipation of possible use. I would even argue that it has never been the primary purpose of a library to build large collections. Rather, the primary mission of a library should be to provide timely access to information. Until recently, the very best means of providing access has been to acquire materials and make them readily available on the shelf, but this may no longer be true in many cases. Economic constraints, commercial document delivery services, and resources available via the worldwide web and in other electronic formats force us to consider a variety of information delivery models. In fact, volatile economic realities are simply making comprehensive library collections something of the past. So, faculty members must commit to identifying journal priorities based on their current teaching and research needs, not on long-term library collection needs.

The Libraries must commit to providing the staff, equipment, and fiscal resources required to provide access to document delivery services and electronic resources. At Kent, we are hypothesizing that these costs can be paid from savings realized through reduced on-site subscriptions. Also, we believe that in an environment of fewer subscriptions, the Libraries must commit to providing table-of-contents information and article abstracts in an electronic format for patrons to easily browse.

Finally, the university Administration must commit to modest annual base increases to the Libraries' materials budget. At Kent, there is no set mechanism for increasing the materials budget. Some years our budget goes up a little while in other years it is stagnant. While I do not expect to ever receive increases to our budget that match the amount of inflation that libraries have been experiencing for the last ten to twenty years, I do think it is imperative for us to be able to plan on a modest annual increase. I have recommended to our Provost that we jointly develop a formula for determining how much the Libraries' materials budget should be adjusted upward each year. Such a formula would be based on either internal factors, such as the number of faculty and students in each discipline, or external factors, such as government supplied inflation indicators. Regardless, the University Administration must commit to the notion that the Libraries are essential to the continued health of the institution and therefore must receive attention on an on going and consistent basis.

In putting into motion this serials management project, we have already met with the entire Chemistry department. Unlike Charles Hamaker's plan, we decided that rather than asking them to develop on their own a prioritized list of journals that are important to them for teaching and research, we actually supplied each faculty member with a list of over 200 journal titles and their costs. This list was not the journals that we currently receive at Kent for the Chemistry department, but were titles that our Chemistry librarian, in consultation with selected faculty, had determined were the most common and important titles to the discipline.

The reason we provided them with a list was to address the ingredient for success that says the faculty must be willing to participate. We figured that perhaps if the

faculty had a list to help them think about journal titles, rather than relying on just their powers of recall, it would be easier for them to proceed and we would get a higher response rate. Also, our hidden agenda was that if they actually saw the cost of some titles that they would consider this in their decision making.

We are still in the process of analyzing the results of this pilot project. We have received prioritized lists from some of the Chemistry faculty members already, and the results look promising. Depending on our final findings, we will modify our procedures and repeat the process with the remaining three science departments already mentioned. Our biggest fear is that we will determine that at Kent State University we are somehow already at a core set of journal subscriptions. Of course, this is not our expectation. We, do know that to be successful, we will need to reduce our expenditures for scientific journals by approximately 60%, but at the same time we will be using a portion of the savings to purchase articles on demand from thousands of journals not currently available to the Kent State University community.

We believe that if we are able to successfully define a core set of journals that represent significantly fewer titles than our current subscriptions for the four key science departments, and if we are successful in securing a modest annual base budget increase, then we will be able to continue into the next century without canceling any of our subscriptions for the remaining forty-five academic programs. In the end, the Libraries primary mission of providing access to information will actually be enhanced with a greater mixture of expenditures between collection building and information access, rather than simply continuing a decline in the number of subscriptions across the university.

Broadly stated, our goals are to acknowledge the importance of journals to scholarly communication, halt the absolute erosion of the our journal collections, engage the faculty more fully in defining their needs, gain a long-term commitment from the university to the Libraries' budget, expand and enhance the Libraries' ability to provide access to information, and develop a fiscally manageable plan that does not divert all new funds from book purchases to meeting journal inflation.

The future

Now, having outlined a model for managing journal collections that depends on extensive use of commercial document delivery services, I must state what some of you may already know. There are some dangers in relying too much on these commercial services.

First, it is reasonable to expect the cost of these services to increase across time. Typically, the fee for purchasing an article from a commercial service consists of two parts. Part one is the amount that is charged by the service for overhead and profit. Part two is the copyright fee that is then paid by the service to the copyright holder who is typically the journal publisher. As journal publishers lose revenue due to reduced numbers of subscriptions, they may very well decide to compensate by increasing the copyright fees that they charge to the commercial delivery services who then pass that fee along to libraries.

Second, some publishers are now refusing to allow their articles to be sold by third-party services. The publishers either may want to sell the articles themselves, or want to try to force libraries to maintain subscriptions.

Needless to say, any model of managing on demand access to information that relies on commercial services will be at the mercy of the marketplace. It is not even difficult to imagine the situation evolving to where only the most profitable, or frequently requested articles, are available.

Consortial arrangements

In light of this capricious situation, you may wonder how I can advocate the model that I have described and that we are implementing at Kent. I do so knowing well that there are other alternatives on the horizon that will soon enough transform fundamentally the way libraries manage journal expenditures.

Since the mid-1970s, Kent State University has engaged actively in consortia programs to manage library resources efficiently. My institution is a founding member of OCLC, the bibliographic utility designed to share cataloging information and allow interlibrary borrowing of materials among libraries worldwide. Kent State University has been more recently a founding member of OhioLINK, the consortium of Ohio's academic libraries. OhioLINK allows member institutions to function in many ways as one library, with a common online catalog and expedited delivery of books among university campuses. OhioLINK also makes available through the online catalog over forty research databases, including citation indexes and fulltext resources.

Most recently, OhioLINK has established for all the member institutions, a subscription licensing agreement with the publisher Academic Press for electronic access to all of its journal publications. To illustrate what this means for a member institution like mine, in 1995 the Kent libraries received eighty-four print journals from Academic Press and now, we have worldwide web access to the fulltext of all 175 Academic Press titles.

The most interesting thing about this new access is the nature of the financial agreement reached between OhioLINK and Academic Press. The agreement commits Kent State University to a fixed annual fee for electronic access to all Academic Press journals, regardless of the number of print Academic Press titles we continue or don't continue to receive. In other words, Kent is paying Academic Press approximately \$50,000 this year for access, and just happening to get eighty-four of their print titles for free because we were subscribing to those titles at the time the deal was initiated. If we were to cancel some or all of the print subscriptions, it would not change the fact that we owe Academic Press \$50,000 this fiscal year.

The bottom line is that while we have increased the number of Academic Press journals available to the Kent campus community from 84 to 175 at no additional costs (actually we are seeing a bit of a savings), we have also lost completely our ability to manage our journal expenditures with this publisher through title by title cancellations. It is now essentially an all or nothing arrangement.

I propose that this is a relatively good situation. If we stop to contemplate the dangerous pricing cycle that has emerged from wide spread journal cancellations in North America, and by this I mean that the more we cancel the more prices continue to climb, then such an arrangement as that which has been arrived at between OhioLINK and Academic Press helps to stabilize the economic environment. It provides the publisher with a fixed revenue stream which means that the rate of increase can then be negotiated for the term of the multi-year agreement. This, in turn, allows a library like Kent to plan for slightly more manageable, if not ideal, price increases because they are known ahead of time.

Given that this type of arrangement between a consortium and a publisher does help to secure a fixed revenue stream, it should not surprise you that other major scientific publishers are in contact with OhioLINK. The danger in establishing too many of these consortial licensing arrangements is two-fold: 1) if the entire state of Ohio is removed from the "normal" marketplace, then this may make journal pricing even more volatile for academic libraries outside of the OhioLINK consortium and 2) as library budgets continue to increase minimally, if at all, then the need to reduce journal expenditures will more greatly affect smaller publishers and publishers that are not part of a consortium agreement. This second danger is particularly disconcerting in that if smaller publishers are forced out of business, then any leverage that libraries may have in dealing with larger scientific publishers may be reduced as these publishers gain a greater monopoly over the marketplace.

It also seems that an important component of negotiating consortial arrangements with publishers for electronic access would be the need for libraries to know about the actual use of electronic journal titles. Now, libraries can collect use data about print journals relatively easily if they so decide. In the electronic world, this piece of information, how much am I using what I am paying for, could be a critical point of negotiation. I am not sure how likely it is that publishers will be willing to share that information.

Conclusion

It seems from everything that I've tried to touch upon here today that one thing is evident, libraries are experiencing fundamental changes in how they serve the academic community. Since the mid-1940s, university libraries in North America have attempted to build larger and larger collections. We have trained our faculty to take great pride in the our collections. In fact, the strengths of a library's collections are often used as recruitment incentives to attract respected scholars to an institution. In addition, faculty are often engaged to assist the library director in making a case for increased funding for the purchase of library materials.

Now it is time to re-train the faculty. As mentioned, I think that the primary mission the academic library has always been to provide timely access to information. The building of great collections was just a means to an end. The goal of academic librarianship today, at least for collection managers, is to determine how to maximize fiscal resources so that faculty and students have access to information and knowledge they need for teaching, research, and learning. Clearly, the fiscal resources that we

absolutely must regain control over are those increasingly committed, at an alarming rate, to the purchase of scientific journals.

We must be prepared to work closely with faculty, through demonstration and partnership, to persuade them that a balance between traditional library collections, on demand document delivery services, and electronic data increases their access to worldwide information resources. We must also demonstrate that the finances required to provide this balance need to be reallocated from current purchasing practices. I believe that at Kent we will accomplish this through our Trilateral Plan that calls upon commitments from all areas of the academic community. This plan is demonstrating to faculty that the Libraries are in charge of actually managing, rather than just administering, journal expenditures and that the faculty remain central to defining the core, collection needs of their library.